CEMONT

CHAPTER 3

MIG/MAG welding

Introduction pages 3-2 & 3-3

WELDING POWER SOURCES

Transformer technology power sources

- **EASYMIG 131 / 151 / 170 DUAL** page 3-6
- **MAXISTAR 180 M / 200 M / 250 T / 280 T** page 3-7
- **BLUMIG 241 C / 281 C / 243 C / 253 C / 283 C / 353 C** page 3-8
- **BLUMIG 303 S / 353 S / 403 S / 503 S** page 3-9
- **TF 300 / 400 / 400 H (wire feeders for BLUMIG S)** page 3-10

Inverter technology power sources

- **PRECISA 201 SG** page 3-11
- **PRECISA 420 PH** pages 3-12 & 3-13

Thyristor technology power source

- **MT 603 S(H)** pages 3-14 & 3-15

Options and accessories

Rollers for wire feeders, pressure regulators / flowmeters etc... page 3-16

TORCHES

- **MIG/MAG torches** page 3-17
- **Wear parts for MIG/MAG torches** page 3-18

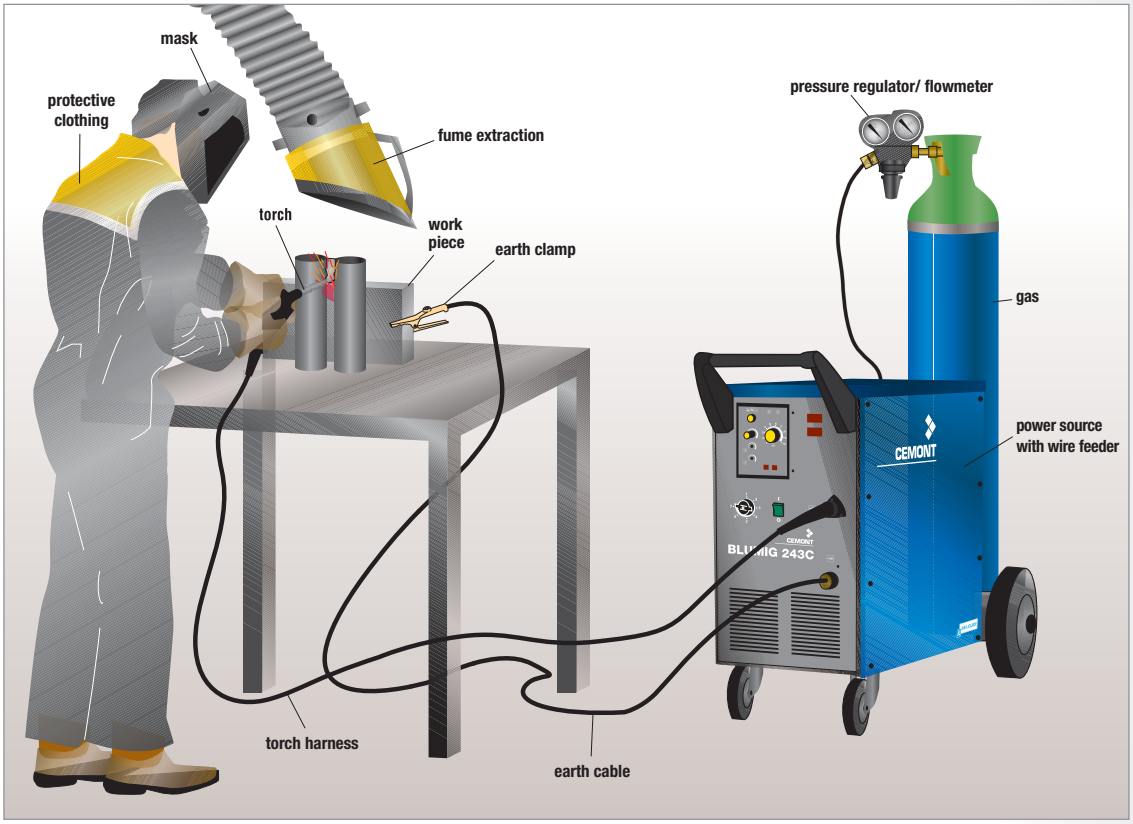
WARRANTY 2 YEARS

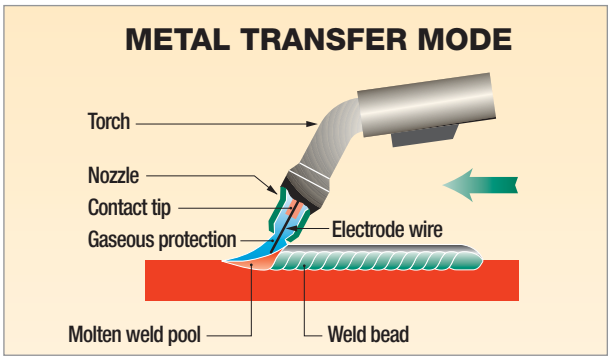
For all accessories and protection products, consult our WELDLINE catalogue and visit our website **www.weldline-alw.com.**

CEMONT

MIG/MAG Welding Process

A TYPICAL MANUAL MIG/MAG WELDING INSTALLATION





MIG/MAG Welding Process

The MIG/MAG welding processes use an arc under gaseous protection.

The electrode is a metallic wire.
The electrode, the metal transferred in the arc and the weld bead are protected from the atmosphere by an inert gas for MIG welding and an active gas for MAG welding.

The definition explains the names MIG (Metal Inert Gas) and MAG (Metal Active Gas).

In manual welding this process is called semi-automatic because the wire is fed automatically as soon as the arc starts.

AIR LIQUIDE WELDING

Gas selection:

AIR LIQUIDE

MIG/MAG process (semi-auto)	
	Gas recommendation:
mild steel	ARCAL 21 ARCAL 14 ATAL 5
stainless steel	ARCAL 12 ARCAL 121 NOXALIC 12
aluminium and copper alloys	ARCAL 1 ARCAL 31 ARCAL 32 or 37

SELF positions:

SELF role:
- used in short-circuit mode,
- limits the short-circuit current,
- the higher the SELF, the colder, the weld bead.

Ω Small SELF
Used for thinner sections

ΩΩ Big SELF
Used for thinner sections
- ARC is very smooth
- Lower welding speed

ΩΩΩ Total SELF
Used for thinner sections
- ARC is rigid
- Higher welding speed

LEXICON

SEMI-AUTOMATIC WELDING

MIG (Metal Inert Gas): Arc welding process with a consumable wire. This wire is transferred in the arc and the molten metal is deposited in the molten pool, protected by an inert gas.

MAG (Metal Active Gas): Same description as MIG but the gas protection is active (CO_2 or argon + CO_2 mixture).

MIG pulse: The current varies during welding, the power supplies a very precise “shape wave”. Pulse is primarily used for stainless steel and light alloys.

Synergic MIG: The welding parameters are programmed in the power source set for a common evolution according to a predefined law. One single setting is needed which facilitates the use of those machines and improves the welding quality.

2 Times mode: Welding starts by pulling the torch’s trigger. It stops by releasing the trigger.

Spot mode: The power source starts to weld when the trigger is pulled, but welding stops automatically after a pre-set delay.

Intermittent mode: This is a point mode which is repeatable. If the pressure on the trigger is maintained, welding will be re-started after another delay which is also regulated.

MIG/MAG: single-phase range

	105 A	115 A	140 A	170 A	220 A	240 A	280 A
PRECISA					201 SG		
BLUMIG						241 C	281 C
MAXISTAR					180 M / 180 MEC	200 M	
EASYMIG		131 DUAL	151 DUAL	170 DUAL			

MIG/MAG: three-phase range

	220 A	260 A	280 A	330 A	400 A	500 A	520 A
PRECISA						420 PH	
MT							603 SH
BLUMIG S			303 S	353 S	403 S	503 S/SH	
BLUMIG C	243 C		283 C/ 253 ALU	353 C			
MAXISTAR		250 T	280 T				

AIR LIQUIDE WELDING

PRECISA 420 PH

THE CLASS LEADER

» INNOVATION

» QUALITY
AT THE
RIGHT PRICE

» SAFETY

EASYMIG 131/151/170 DUAL

The EASYMIG range is used for smaller jobs requiring light weight and compact equipment, which is easy to use. Available for use: with or without gas, the EASYMIG units are equipped with the essential accessories needed for immediate use.

WARRANTY 2 YEARS

Features and product advantages:

- **Input voltage:** 230 V single-phase.
- **Wire feeder device:** 2 rollers.
- **Simple:** adjustment of the current with a switch and of the wire feed speed with a single knot control.
- **Versatile:** EASYMIG DUAL for welding with steel, stainless steel and aluminium solid wires as well as gasless cored wires.
- **Complete:** delivered with torch and all accessories for immediate use.
- **Portable:** equipped with handle and wheels for easier movement.

PORTABLE FOR MAINTENANCE OPERATIONS

Standards
EN 60974-1
EN 60974-10

1. Handle for transport.
2. On/off switch.
3. Power switch.
4. Wire feed setting.
5. Primary cable.
6. Earth cable.
7. Built-in torch.

TECHNICAL CHARACTERISTICS:

	EASYMIG 131 DUAL	EASYMIG 151 DUAL	EASYMIG 170 DUAL
Input voltage	230 V - single-phase (50/60 Hz)		
Primary consumption	20 A	22 A	24 A
Effective input current	7.7 A	8.5 A	10.2 A
Welding voltage	20 - 35 V	20 - 36 V	18 - 32 V
Welding current range	30 - 105 A	30 - 115 A	30 - 140 A
Duty cycle at 40 °C	105 A (15%)	115 A (15%)	140 A (18%)
Adjustment positions	4		6
Protection index	IP 21		
Dimensions	240 x 510 x 370 mm	240 x 510 x 460 mm	440 x 670 x 750 mm
Weight	21 kg	23.5 kg	36 kg

TO ORDER:

Power source only	**W 000 263 720**	**W 000 263 721**	**W 000 263 722**

• **Wear parts for torches** see page 3-19
• **Wire-feeder roller** see page 3-16

Delivered equipped with:

- electric primary cable,
- equipped earth cable, and built-in torch,
- handle and wheels (wheels on 151 & 170),
- 2 roller plate,
- safety instructions,
- user manual.

MAXISTAR 180 MEC / 200 M
MAXISTAR 250 T / 280 T

MAXISTAR is a range of semi-automatic MIG/MAG welding equipment. Used for welding applications in workshops or for outdoor work.

COMPACT MACHINES FOR LIGHT APPLICATIONS

Standards
EN 60974-1
EN 60974-10

Features and product advantages:

- **Input voltage:** 230 V single-phase or 400 V three-phase.
- **Mode:** continuous or tack welding.
- **Wire feeder:** 2 roller plate.
- **Simple:** adjustment of the current with a switch and of the wire feed speed with a single knob control.
- **Versatile:** for welding with steel, stainless steel and aluminium wires.
- **Reliable:** air cooled transformer.

WARRANTY 2 YEARS

2007-227

1. Thermal safety indicator.
2. Switch on/off.
3. Power switch.
4. Tack welding adjustment.
5. Stick-out adjustment.
6. Starting speed regulation.
7. Wire feed speed.
8. European connection for torch.

2007-228

TECHNICAL CHARACTERISTICS:

		MAXISTAR 180 MEC	MAXISTAR 200 M	MAXISTAR 250 T	MAXISTAR 280 T
Input voltage 50 Hz		230 V - single-phase		400 V - three-phase	
Primary consumption		24 A	32 A	11 A	10 A
Effective consumption		7.5 A	12 A	5.5 A	5.5 A
Adjustment positions		6	8	6	7
Welding voltage		18 - 32 V	18 - 33 V	18 - 35 V	17 - 35 V
Welding current		30 - 170 A	35 - 180 A	35 - 200 A	35 - 200 A
Wire diameter		0.6 - 0.8 mm	0.6 - 0.8 mm	0.6 - 1.0 mm	0.6 - 1.0 mm
Duty cycle at 40 °C	at 30%	140 A (18%)	180 A (15%)	200 A (25%)	200 A
	at 60%	75 A	100 A	130 A	140 A
	at 100%	60 A	75 A	100 A	110 A
Protection index		IP 21		IP 23	
Dimensions (mm)		440 x 670 x 750			500 x 870 x 950
Weight		38.5 kg	43 kg	54 kg	71 kg

• **Torches** see pages 3-17/18
• **Rollers** see page 3-17

TO ORDER:

Power source only	**W 000 263 724**	**W 000 263 725**	**W 000 263 726**	**W 000 263 727**
Options				
Reverse polarity kit	**W 000 257 998**			

Delivered equipped with:

- electric primary cable,
- equipped earth cable,
- 2 roller plate for wire sizes 0.6 - 0.8 mm, 1.0 - 1.2 mm,
- safety instructions,
- user manual,
- torch (only for MAXISTAR 180 M).

BLUMIG 241 C / 281 C - (single-phase)
243 C / 253 C ALU / 283 C / 353 C - (three-phase)

The BLUMIG range of MIG/MAG welding equipment is robust and powerful, providing the best performance on the market and will meet all your needs.

WARRANTY 2 YEARS

COMPACT MACHINES FOR INTENSIVE USE

Standards
EN 60974-1
EN 60974-10

Features and product advantages:

- **Input voltage:** 230 V single-phase and 230 - 400 V three-phase.
- **Mode:** 2 T / 4T / tack welding.
- **Wire feeder:** 4 roller plate.
- **Simple:** adjustment of the current with a switch and of the wire feed speed with a single knob control.
- **Digital display:** included on the BLUMIG 353 and an option for other models.
- **Versatile:** range of gases.
- **Reliable:** air cooled transformer.

• **Torches** see pages 3-17/18
• **Rollers** see page 3-17

1. Selection 2T / 4T / tack welding.
2. Tack welding adjustment.
3. Displays.
4. Stick-out adjustment.
5. Wire speed.
6. Starting speed adjustment.
7. Power switch.
8. Switch on/off.
9. European connection for torch.

Delivered equipped with:

- electric primary cable,
- equipped earth cable,
- rollers 0.8- 1.0 mm,
- safety instructions,
- user manual.

TECHNICAL CHARACTERISTICS:

	BLUMIG 241 C	BLUMIG 281 C	BLUMIG 243 C	BLUMIG 283 C	BLUMIG 353 C	BLUMIG 253 ALU
Input voltage	230 V single-phase		230 - 400 V three-phase			
Primary consumption	38 A	54 A	19 -11 A	27 - 15 A	33 - 19 A	27 - 15 A
Effective consumption	19 A	30 A	10 - 6 A	15 - 9 A	20 - 11 A	15 - 9 A
Adjustment positions	10	14	7	10	14	10
Welding voltage	18 - 35 V	20 - 53 V	18 - 35 V	18 - 40 V	18 - 45 V	18 - 40 V
Welding current range	40 A - 240 A	32 A - 280 A	35 A - 220 A	35 A - 280 A	35 A - 350 A	35 A - 280 A
Wire diameter	0.6 - 1.0 mm	0.6 - 1.0 mm	0.6 - 1.0 mm	0.6 - 1.0 mm	0.6 - 1.2 mm	0.6 - 1.0 mm
Duty cycle at 40 °C at 30%	200 A (25%)	250 A	200 A	250 A	350 A	250 A
Duty cycle at 40 °C at 60%	130 A	175 A	140 A	170 A	270 A	170 A
Duty cycle at 40 °C at 100%	100 A	140 A	110 A	140 A	210 A	140 A
Protection index	IP 23					
Dimensions (mm)	500 x 870 x 950				570 x 930 x 990	500 x 870 x 950
Weight	71 kg	86 kg	71 kg	80 kg	96 kg	80 kg

TO ORDER:

Power source only	W 000 261 955	W 000 261 962	W 000 263 728	W 000 262 179	W 000 263 729	W 000 264 208
Options						
Reverse polarity kit	W 000 257 998					
Digital display	W 000 352 093					

AIR LIQUIDE WELDING

BLUMIG 303 S / 353 S
BLUMIG 403 S / 503 SH

The BLUMIG range of MIG/MAG welding equipment is robust and powerful, providing the best performance on the market and will meet all your needs.

SEPARATE WIRE FEEDER HEAVY DUTY

Standards
EN 60974-1
EN 60974-10

Features and product advantages:

- **Input voltage:** 230 V - 400 V three-phase.
- **Mode:** 2 T / 4T / tack welding.
- **Wire feeder:** 4 roller plate.
- **Perfect starting:** possibility to adjust the starting speed.
- **Stick-out:** adjustable with a potentiometer.
- **Simple:** adjustment of the current with a switch and of the wire feed speed with a single knot control.
- **Digital display:** precise adjustment and optimal reading (standard with 353/403).
- **Versatile:** for all solid or flux cored wires.
- **Powerful:** air cooled transformer.
- **Safety:** protection class IP 23.
- **Ergonomic design:** due to its pivoting wire feed unit support.

2007-156

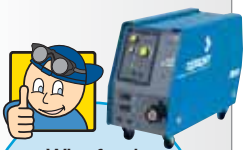
1 Selection 2T / 4T / tack welding.
2 Tack welding adjustment.
3 Wire speed.
4 Stick-out adjustment.
5 Starting speed regulation.
6 Digital displays.
7 European connection for torch
8 Power and on/off switch.
9 Power switch (precise adjustment).

WARRANTY 2 YEARS

2007-157

TECHNICAL CHARACTERISTICS:

	BLUMIG 303 S	BLUMIG 353 S	BLUMIG 403 S	BLUMIG 503 S / SH
Compatible wire feeders	TF 300 - TF 400			TF 400 - TF 400H
Input voltage 50 Hz	230 V - 400 V three-phase			
Primary consumption	27 - 15 A	33 - 19 A	42 - 24 A	60 - 34 A
Effective consumption	15 - 8.5 A	20 - 11 A	25 - 14 A	35 - 20 A
Adjustment positions	10	14	21	30
Welding voltage	18 - 40 V	18 - 45 V	18 - 46 V	19 - 54 V
Welding current	35 - 280 A	40 - 330 A	35 - 400 A	50 - 500 A
Wire diameter	0.8 - 1.0 mm	0.8 - 1.2 mm	0.8 - 1.2 mm	0.8 - 1.6 mm
Duty cycle at 40 °C at 35%	250 A (30%)	300 A	350 A	450 A
Duty cycle at 40 °C at 60%	170 A	230 A	270 A	345 A
Duty cycle at 40 °C at 100%	140 A	180 A	210 A	270 A
Protection index	IP 23			
Dimensions (mm)	500 x 1180 x 950			600 x 1250 x 1050
Weight	73 kg	84 kg	104 kg	145 kg



• Wire feeder
see page 3-11
• Torches
see pages 3-17/18
• Rollers
see page 3-17

TO ORDER:

Power source only	**W 000 263 730**	**W 000 263 731**	**W 000 263 732**	**W 000 263 734 (S) W 000 263 735 (SH)**
Cooler unit	-	-	-	**W 000 262 188***
Liquid for cooling unit	-	-	-	**W 000 227 236***
Options				
Digital display	**W 000 352 093**	**of series**		

** For BLUMIG 503 SH only*

Delivered equipped with:

- electric primary cable,
- equipped earth cable,
- safety instructions,
- user manual.

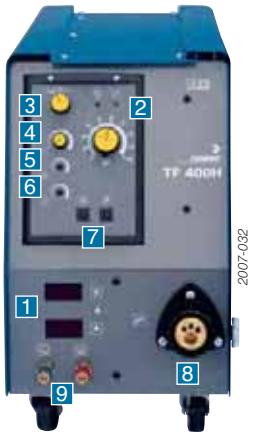
TF 300 (air) / 400 (air) / 400H (water)

The TF wire feeders are compatible with all the power sources in the BLUMIG S range.
Delivered as standard with an insulated cable.

Features and product advantages:

- **Sealed structure:** protection of the wire feeding system.
- **Digital display:** A/V included on TF 400 and TF 400H.
- **Ergonomic design:** adjustment on the front panel, and pivoting wire feed unit support for easier storage and orientation of the wire feeders.
- **Efficient wire feeding:** 4 roller plate.
- **Safety:** secure locking of the wire feeding compartment.

2006-896



2007-032

1. Digital display A/V.
2. Wire speed.
3. Mode 2T / 4T / tack welding.
4. Tack welding adjustment.
5. Starting speed.
6. Stick-out adjustment.
7. Test / Purge gas / Wire advance.
8. Torch connection.
9. Water inlet / outlet on TF 400H type.

Rollers see page 3-17

TECHNICAL DATA:
TF 300 - TF 400 - TF 400 H

	TF 300 AIR	TF 400 AIR	TF 400 WATER
Digital display A/V	-	✔	✔
Wheels	✔	✔	✔
Equipped for water cooled torch	-	-	✔
Rollers	0.8 - 1.0 mm / 1.0 - 1.2 mm for steel		

Cat. no.	TF 300	TF 400	TF 400 H
Cable length 5 m	W 000 263 745	W 000 263 747	W 000 263 749
Cable length 10 m	W 000 263 746	W 000 263 781	W 000 263 750
Cable length 20 m	-	W 000 263 748	W 000 263 751

PRECISA 201 SG

WARRANTY 2 YEARS

The MX 201 SG / PRECISA 201 SG is a multi-process inverter technology power source. Its weight, power and primary single-phase input voltage, make the PRECISA 201 the specialist for rapid maintenance operations.

PORTABLE MULTI-PROCESS

Standards
EN 60974-1
EN 60974-10

Features and product advantages:

- **Input voltage:** 230 V single-phase.
- **Display:** digital A / V.
- **Multi-process:** MIG / MMA / TIG DC.
- **Wire feeder:** 2 roller.
- **Professional:** robust construction with handle.
- **Programmable:** 9 programs available, 11 program memory.
- **Polarity inversion:** for welding applications with gasless flux cored wire.
- **Wire spool:** D 200, D 300 optimal.
- **MIG torch connections:** with European connectors or Spool Gun.

2007-629

1. Digital display.
2. Program mode buttons.
3. Potentiometer.
4. MIG / MMA / TIG DC selection.
5. Selection 2T / 4T / point.
6. European connector for torch.
7. Spool Gun connection control.
8. Welding current adjustment.
9. Wire speed regulation.

2007-630

TECHNICAL CHARACTERISTICS:

		PRECISA 201 SG		
		MMA	TIG	MIG
Input voltage 50/60 Hz		230 V single-phase		
Primary consumption		23 A	16 A	21 A
Effective consumption		35 A	27 A	35 A
Open circuit voltage		70 A	25 V	50 A
Welding current range		28 - 180 A	5 A - 200 A	30 - 200 A
Duty cycle at 40 °C	at 35%	-	200 A	200 A
	at 40%	180 A	-	-
	at 60%	140 A	155 A	155 A
	at 100%	115 A	125 A	125 A
Wire diameter		0.6 - 1.0 mm		
Protection index		IP 23		
Dimensions		235 x 470 x 570 mm		
Weight		29 kg		

• **Torches** see pages 3-17/18
• **Rollers** see page 3-17

TO ORDER:

Power source only	**W 000 263 772**
Options	
15 kg spool support	**W 000 253 322**

Delivered equipped with:

- electric primary cable,
- earth cable,
- rollers for wires 0.8 / 1.0 mm,
- safety instructions,
- user manual.

PRECISA 420 PH

WARRANTY 2 YEARS

The PRECISA 420 PH is the ideal partner when it comes to the flexibility required for welding on all materials (steel, light alloys or applications such as agricultural machines, metallic furniture, etc...). Designed for both conventional and advanced MIG/MAG processes (for thin plate MIG brazing etc...) and also for MMA applications. This machine is optimized due to the facilities for adjustment and the wide range of synergic programs for all materials and gas combinations. This installation is the best solution for an efficient machine, which is easy to adjust and easy to use.

Features and product advantages:

- **Numerical control** of parameters giving exceptional arc stability and welding quality.
- **Water cooled**.
- **Easy selection of parameters**, easy to read digital displays.
- **Synergic curves** available as standard to optimize results with a simple “one button” selection.
- **A wide set of welding processes** available for optimum welding in all situations:
  - ***Speed Short Arc™:*** high welding speed / low deformation on thin plates,
  - ***Pulsed:*** for optimum aluminium and stainless steel welding,
  - ***Cold Double Pulse™:*** for the highest quality on thin plates especially stainless and aluminium, weld bead with TIG aspect,
  - ***MIG Brazing:*** for thin coated plates, e.g. car body repair, with low deformation and good mechanical characteristics.

Standards
EN 60974-1
EN 60974-10

SYNERGIC PULSED FOR TOP WELDING RESULTS

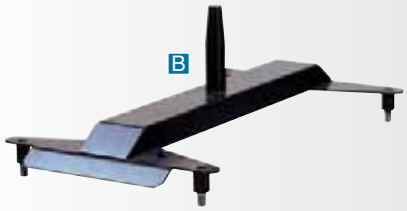
1. Welding voltage and set up parameter display.
2. Welding current or wire speed or thickness display.
3. Mode and welding cycle selection LEDs.
4. Process choice selector.
5. Gas selector.
6. Wire grade selector.
7. Wire diameter selector.
8. Scrolling of set up parameters.
9. Parameter setting.
10. Selector for wire speed or thickness display.

• **Torches** see pages 3-17/18
• **Rollers** see page 3-17

PRECISA 420 PH

Basic functions:

- Wire speed setting (empty)
- Wire speed setting (welding)
- Arc length setting (empty)
- Arc length setting (welding)
- End setting (empty)
- End setting (welding)
- Spot 2T/4T/cycle
- Hot start
- Fading
- Spray end
- Synergic mode
- Semi-synergic mode
- Parameter saving
- Display calibration
- Assisted calibration
- Software update
- Error messages
- Language choice



TECHNICAL CHARACTERISTICS:

		PRECISA 420 PH
Three-phase input voltage		400 V - 50/60 Hz
Primary consumption		44.5 A (60%) - 39 A (100%)
Open circuit voltage		106 V
Welding current range		20 A - 420 A
Duty cycle at 40 °C	at 45%	420 A
	at 100%	350 A
Protection index		IP 23 S
Dimensions (with trolley and feeder)		1150 x 750 x 1500 mm
Weight		107 kg

TO ORDER:

	Power source water cooled	**W 000 273 132**	
	Option		
A	**Wire feeder TF 420H**	**W 000 273 133**	
	Workshop trolley for power source	**W 000 550 046**	
B	**Pivot stand** (requires wire feeder trolley)	**W 000 550 048**	
C	**Workshop trolley for wire feeder**	**W 000 550 050**	
D	**RC-JOB remote control**	**W 000 273 134**	
	Harnesses	**Steel**	**Aluminium**
	2 m	**W 000 055 091**	**W 000 055 095**
	5 m	**W 000 055 092**	**-**
	10 m	**W 000 055 093**	**W 000 055 096**
	15 m	**W 000 055 094**	**W 000 055 097**

Delivered equipped with:

- electric primary cable,
- earth cable,
- rollers for wire 0.8 / 1.0 mm,
- safety instructions,
- user manual.

MT 603 SH

The MT 603 S(H) is a synergic thyristor controlled unit for MIG-MAG welding. Robust and powerful it has been designed to produce high quality welds for the widest range of industrial applications.
The separate wire feeders (air-water cooled) are available with different lengths of harness for all your welding needs.

Features and product advantages:

- **Input voltage:** 220-230-240-380-400-415-440 V three-phase.
- **Mode:** 2T / 4T welding cycle.
- **Wire feeder:** 4 roller plate.
- **Perfect starting:** possibility to adjust the starting speed.
- **Arc extinction device (stick-out):** adjustable with knob.
- **Simple:** easy adjustment of the welding parameters with the OPT system function which is a synergic mode with access to pre recorded parameters which optimise welding performance.
- **Flexibility:** possibility to modify the welding parameters (also in welding) from the wire feeder or from the remote control when available.
- **Digital display:** precise pre-setting of welding thickness or wire speed and optimal reading of welding parameters (A + V).
- **Versatile:** for all solid or flux cored wire welding.
- **Powerful:** power transformer, choke and rectifier air cooled.
- **Safety:** protection class IP 23.
- **Ergonomic:** due to its pivoting wire feed unit support (option).

WARRANTY 2 YEARS

Standards
EN 60974-1
EN 60974-10

**SYNERGIC CONTROL
THYRISTOR TECHNOLOGY**

1. 2T / 4T welding cycle.
2. Crater filler cycle.
3. Gas selection.
4. Solid or cored wire selection.
5. Display for current, thickness and wire speed.
6. Voltage display.
7. Selection for the display 5.
8. Material selection.
9. Wire diameter selection.
10. ON and warning lamps.
11. ON / OFF switch.

TECHNICAL CHARACTERISTICS:

		MT 603 SH
Wire feeder range		DV44i - DV44iw
Three-phase input voltage (50 / 60 Hz)		220-230-240-380-400 415-440 V
Primary consumption at I max.		77.6 A (230 V) - 44.6 A (400 V)
Effective consumption		60.1 A (230 V) - 34.5 (400 V)
Voltage regulation		Continuous adjustement
Open-circuit voltage		61 V
Welding current		40 - 520 A
Wire diameter		0.8 - 1.6 mm (2.4 mm FCW)
Duty cycle at 40 °C	at 60%	520 A
	at 100%	370 A
Protection index		IP 23
Dimensions		680 x 460 x 1200 mm
Weight		208 kg

TO ORDER:

Power source only	**W 000 263 736**

Delivered equipped with:

- primary cable 5 m,
- earth cable 5 m with clamp,
- gas hose 2 m,
- safety instructions,
- user manual.

MT 603 SH Additional units

• For torches
see page 3-18/19

To order:

Cooler unit COOLER II	W 000 302 009
Liquide for cooling unit FREEZCOOL 10L	W 000 010 167

DV44i (air) / DV44iw (water)

The DV44i(w) wire feeders are compatible with the MT 603 S(W) power source. They are delivered as standard with sheathed cables (different lengths), trolley and spool cover.
Wire feeder for intensive use.

4 ROLLERS DIAMETER 37 mm

Standards
EN 60974-5

Features and product advantages:

- **Sealed structure:** protection of the wire feeding system.
- **Easy to use:** synergic and manual adjustment of welding parameters.
- **Comfortable:** due to its pivoting wire feed unit support (option) changing the orientation of the feeder making welding easier.
- **Efficient wire feeding:** 4 roller plate.
- **Safety:** no access to moving parts and protection enclosure IP 23.
- **Simple:** feeder with handle for ease of movement.
- **Robust:** sheathed cables and torch support.
- **Versatile:** for all kinds of solid and flux cored wires up to 2.4 mm.

Rollers see page 3-17

To order:

	Wire feeder DV 44i D37 (air)	5 m	W 000 268 844
		10 m	W 000 268 845
		15 m	W 000 268 846
	Wire feeder DV 44iW D37 (water)	5 m	W 000 268 847
		10 m	W 000 268 848
		15 m	W 000 268 849
	Torch WMT 36 A - 3 m (air)		W 000 010 605
	Torch WMT 500 W - 3 m (water)		W 000 010 608
	Options		
A	Remote control		W 000 305 112
B	Pivot support		W 000 305 010
C	Slinging ring		W 000 305 061

1. Rollers for wire feeders

EASYMIG / MAXISTAR ranges

Roller	Steel
0.6 / 0.8 mm	W 000 232 110
1.0 / 1.2 mm	W 000 232 112
Entry wire guide	W 000 231 810

BLUMIG range

Roller	Steel	Alu	Flux cored wire
0.6 mm	W 000 050 096	-	-
0.8 mm	W 000 050 097	W 000 050 100	-
1.0 mm	W 000 050 098	W 000 050 101	-
1.2 mm	W 000 050 099	W 000 050 102	W 000 264 870 (1.0 / 1.2 mm)
1.6 mm	W 000 218 767	-	W 000 265 883 (1.4 / 1.6 mm)
Entry wire guide	W 000 233 472		
Intermediate wire guide	W 000 252 183		
Exit wire guide	W 000 269 661		

PRECISA 201 SG range

Roller	Steel	Alu	Flux cored wire
0.6 - 0.8 mm	W 000 352 037	-	-
1.0 - 1.2 mm	W 000 352 036	W 000 270 323	W 000 227 891
Entry wire guide	W 000 227 907		

MT 603 S(H) range

<table>
<tr><th colspan="2"></th><th>Entry wire guide</th><th colspan="2">Roller</th><th>Intermediate wire guide</th><th colspan="2">Exit wire guide</th><th>ALUKIT</th></tr>
<tr><td rowspan="5">Steel</td><td>0.6</td><td rowspan="5">W 000 305 150</td><td rowspan="2">W 000 305 125</td><td rowspan="3">W 000 267 598</td><td></td><td></td><td rowspan="3">W 000 271 819</td><td></td></tr>
<tr><td>0.8</td><td></td><td></td><td></td></tr>
<tr><td>1.0</td><td rowspan="2">W 000 267 599</td><td></td><td rowspan="2">W 000 271 820</td><td></td></tr>
<tr><td>1.2</td><td rowspan="2">W 000 305 126</td><td rowspan="2">W 000 271 821</td><td></td></tr>
<tr><td>1.6</td><td></td><td></td><td></td></tr>
<tr><td rowspan="3">Alu</td><td>1.0 - 1.2</td><td></td><td colspan="2">W 000 260 185</td><td rowspan="3">W 000 305 135</td><td></td><td></td><td>W 000 255 648</td></tr>
<tr><td>1.2 - 1.6</td><td></td><td colspan="2">W 000 260 186</td><td></td><td></td><td>W 000 255 649</td></tr>
<tr><td>1.6 - 2.4</td><td></td><td colspan="2">W 000 260 187</td><td></td><td></td><td>W 000 255 650</td></tr>
<tr><td rowspan="3">Flux cored wire</td><td>1.0 - 1.2</td><td rowspan="2">W 000 305 150</td><td colspan="2"></td><td></td><td colspan="2">W 000 271 820</td><td></td></tr>
<tr><td>1.2 - 1.6</td><td colspan="2">W 000 266 330</td><td></td><td colspan="2">W 000 271 821</td><td></td></tr>
<tr><td>1.6 - 2.4</td><td></td><td colspan="2">W 000 266 331</td><td></td><td></td><td></td><td></td></tr>
</table>

2. Welding torches

EASYMIG/MAXISTAR ranges

	EASYMIG 151	EASYMIG 170	MAXISTAR 180
Replacement torch	W 000 264 746	W 000 228 236	W 000 228 238

MAXISTAR / BLUMIG / PRECISA ranges

Torches		WMT 15 A	WMT 25 A	WMT 36 A	WMT 500 W
Cooling		Air	Air	Air	Water
Duty cycle at 60%	CO_2	180 A	230 A	360 A	500 A (at 100%)
	Ar + CO_2	150 A	200 A	330 A	450 A (at 100%)
Length	3 m	W 000 010 600	W 000 010 602	W 000 010 605	W 000 010 608
	4 m	W 000 010 601	W 000 010 603	W 000 010 606	W 000 010 609
	5 m	-	W 000 010 604	W 000 010 607	W 000 010 610

Spool Gun SG 150 Aria - 150 A - 100% - 6 m	W 000 228 491
Spool Gun SG 300 Aria - 300 A - 100% - 6 m	W 000 228 490

WMT MIG/MAG torches

A complete range of torches for MIG/MAG welding, designed to meet all requirements when semi-automatic welding.

- **WMT 15 A:** for car bodies due to its compactness.
- **WMT 25 A:** for metal construction and maintenance jobs.
- **WMT 36 A:** for boiler making and metal frame manufacturing.
- **WMT 500 W:** for heavy duty work needing a water cooled torch.

2007-139

2007-140

Standards
EN 60974-1
EN 60974-7

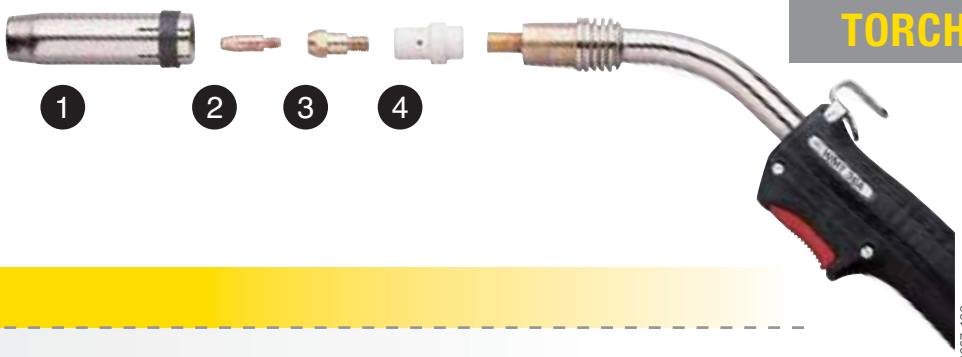
Features and product advantages:

- Well balanced.
- Ergonomic handle for a perfect grip.
- Flexibility due to the back knee joint.
- Wear parts according to European standard.
- European connector.
- Rest hook.

TECHNICAL CHARACTERISTICS:

TORCH	WMT 15 A	WMT 25 A	WMT 36 A	WMT 500 W
Cooling	air	air	air	water
Duty cycle at 60% CO_2	180 A	230 A	360 A	500 A
Ar + CO_2	150 A	200 A	330 A	450 A
Voltage class	L 113 - 1			
Suitable wires	Steel 0.6 to 1.0 mm	Steel 0.8 to 1.2 mm	Steel 0.8 to 1.6 mm	Steel 0.8 to 2.4 mm
	-	Alum. 1.0 to 1.2 mm	Alum. 1.0 to 1.6 mm	Alum. 1.0 to 2.4 mm
Gas flow	10 to 18 l/min	10 to 18 l/min	10 to 18 l/min	10 to 25 l/min
Delivered equipped with				
Contact tip	Steel 0.8 mm	Steel 1.0 mm	Steel 1.2 mm	Steel 1.2 mm
Nozzle (diameter)	12.5 mm	14.0 mm	16.0 mm	16.5 mm
Sheath	For steel wire 0.6 - 0.8 mm	For steel wire 1.0 - 1.2 mm	For steel wire 1.0 - 1.2 mm	For steel wire 1.0 - 1.2 mm

Length	WMT 15 A	WMT 25 A	WMT 36 A	WMT 500 W
3 m	W 000 010 600	W 000 010 602	W 000 010 605	W 000 010 608
4 m	W 000 010 601	W 000 010 603	W 000 010 606	W 000 010 609
5 m	-	W 000 010 604	W 000 010 607	W 000 010 610



1. Nozzle
2. Contact tip
3. Clamp
4. Diffuser

2007-138

WEAR PARTS:

PU	Types	Ø	Cat. nr	WMT 15 A	WMT 25 A	WMT 36 A	WMT 500 W
CONTACT TIP	M6 x 25 steel	0.6 AC	W 000 010 820	✔			
		0.8 AC	W 000 010 821	✔			
		1.0 AC	W 000 010 822	✔			
	M6 x 28 steel	0.8 AC	W 000 010 826		✔		
		1.0 AC	W 000 010 827		✔		
		1.2 AC	W 000 010 828		✔		
	M6 x 28 alu	1.0 Al	W 000 010 850		✔		
		1.2 Al	W 000 010 851		✔		
	M8 x 30 steel	0.8 AC	W 000 010 834			✔	✔
		1.0 AC	W 000 010 835			✔	✔
		1.2 AC	W 000 010 836			✔	✔
		1.6 AC	W 000 010 837			✔	✔
	M8 x 30 alu	1.0 Al	W 000 010 853			✔	✔
		1.2 Al	W 000 010 854			✔	✔
		1.6 Al	W 000 010 855			✔	✔
CLAMP	M6 x 35	-	W 000 010 720		✔		
	M6 x 28	-	W 000 010 722			✔	
	M8 x 25	-	W 000 010 724				✔
DIFFUSER	classical	-	W 000 010 780			✔	
	high temp.	-	W 000 010 781			✔	
	ceramics	-	W 000 010 782			✔	
	classical	-	W 000 010 783				✔
	high temp.	-	W 000 010 784				✔
	ceramics	-	W 000 010 785				✔
NOZZLE	conical	12.5 mm	W 000 010 786	✔			
		10.0 mm	W 000 010 787	✔			
		14.0 mm	W 000 010 790		✔		
		12.0 mm	W 000 010 791		✔		
		16.0 mm	W 000 010 794			✔	
		14.0 mm	W 000 010 795			✔	
		16.5 mm	W 000 010 797				✔
		14.5 mm	W 000 010 798				✔
	cylindrical	16.0 mm	W 000 010 788	✔			
		17.0 mm	W 000 010 792		✔		
		20.0 mm	W 000 010 796			✔	
		20.0 mm	W 000 010 799				✔
SHEATH	steel - length 3 m	0.6 - 0.8	W 000 010 730	✔	✔	✔	✔
	steel - length 4 m	1.0 - 1.2	W 000 010 731	✔	✔	✔	✔
	alu - length 3 m	0.6 - 0.8	W 000 010 733	✔	✔	✔	✔
	alu - length 4 m	1.0 - 1.2	W 000 010 734	✔	✔	✔	✔
	alu - length 3 m	1.0 - 1.2	W 000 010 736	✔	✔	✔	✔